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Sommario/riassunto

This is an ecology textbook focused on key principles that underpin research and management at the landscape scale. It covers (1) agents of pattern (the physical template, biotic processes, and disturbance regimes); (2) scale and pattern (why scale matters, how to 'scale' with data, and inferences using landscape pattern metrics); and (3) implications of pattern (for metapopulations, communities and biodiversity, and ecosystem processes). The last two chapters address emerging issues: urban landscapes, and adapting to climate change. This book stems from two graduate-level courses in Landscape Ecology taught at the Nicholas School of the Environment at Duke University. The subject has evolved over time, from a concepts-based overview of what landscape ecology is, to a more applied practicum on how one does landscape ecology. As landscape ecology has matured as a

discipline, its perspectives on spatial heterogeneity and scale have begun topermeate into a wide range of other fields including conservation biology, ecosystem management, and ecological restoration. Thus, this textbook will bring students from diverse backgrounds to a common level of understanding and will prepare them with the practical knowledge for a career in conservation and ecosystem management.